

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/AU2005/000445

A. CLASSIFICATION OF SUBJECT MATTER		
Int. Cl. <sup>7</sup> : G06K 9/32; G06K 7/10; G06T 1/00		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols)		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) DWPI & keywords: Image, Pattern, Test, Align, Pixel, Segment, Distortion, Label, Camera and similar terms		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 08-201913 A (FUJITSU LTD) 9 August 1996 See the whole document	1-7, 9, 20, 21, 24, 25 10-13
Y	US 6 219 155 B1 (ZUBER) 17 April 2001 column 31, line 58 – column 34, line 41	14-17, 22, 26
X	GB 2 203 919 A (SONY CORPORATION) 26 October 1988 See the whole document	10-13
Y	JP 08-095371 A (FUJI XEROX CO LTD) 12 April 1996 See the whole document	1-17, 19-22, 24-26
A		
A		
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C <input checked="" type="checkbox"/> See patent family annex		
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family		
Date of the actual completion of the international search 17 May 2005		Date of mailing of the international search report 25 MAY 2005
Name and mailing address of the ISA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No. (02) 6285 3929		Authorized officer  EVAN SULCS Telephone No : (02) 6283 2442

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## Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2. ☐ Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
  
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

## Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

Refer to extra sheet for indication of multiple inventions.

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☒ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
  
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

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## Supplemental Box

(To be used when the space in any of Boxes I to VIII is not sufficient)

### Continuation of Box No: III

The international application does not comply with the requirements of unity of invention because it does not relate to one invention or to a group of inventions so linked as to form a single general inventive concept. In coming to this conclusion the International Searching Authority has found that there are three inventions:

1. Claims 1-13, 19-21, 24 and 25 are directed to a method, an apparatus and a computer readable medium comprising a computer program for measuring performance parameters of an image device/printer wherein a test pattern image is maintained thus comprising alignment features and image analysis features; imaging a test chart in order to form a second image wherein the test chart contains a representation of said test pattern image; registering said test pattern image and said second image using region based matching operating on said alignment features and measuring the performance parameters by analysing said image analysis features. It is considered that the configuration indicated above comprises a first set of "special technical features".
2. Claims 14-17, 22 and 26 are directed to a method, an apparatus and a computer readable medium comprising a computer program for generating a test pattern thus consisting of dividing an image into a predetermined number of areas; dividing each of these areas into smaller areas; assigning properties to at least one of said smaller areas; generating pixel values for said at least one of said smaller areas wherein the pixel values are in accordance with said properties and repeating this procedure from the division of the areas into smaller areas. It is considered that the configuration indicated above comprises a second set of "special technical features".
3. Claims 18, 23 and 27 are directed to a method, an apparatus and a computer readable medium comprising a computer program for analysing images thus comprising receiving first and second images with the second being a distorted version of the first image; labelling the pixels of the first images; determining distortion parameters for aligning the two images together; warping at least said pixel labels using these parameters and associating the pixel labels with the corresponding pixels in the second image wherein the labels provide information on a state of pixels in said second image before distortion. It is considered that the configuration indicated above comprises a third set of "special technical features".

Since the abovementioned groups of claims do not share either of the technical features identified, a "technical relationship" between the inventions, as defined in PCT rule 13.2 does not exist. Accordingly the international application does not relate to one invention or to a single inventive concept.

As the search for the second and third invention did not require more than a negligible additional search effort over that for the first invention, additional search fees were not warranted in this situation.

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		International application No.
		PCT/AU2005/000445
C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 636 216 B1 (SILVERBROOK <i>et al</i> ) 21 October 2003 See the whole document	18, 19, 23, 27
A	US 6 128 414 A (LIU) 3 October 2000 See the whole document	18, 19, 23, 27
A	US 5 175 808 A (SAYRE) 29 December 1992 See the whole document	18, 19, 23, 27
A	US 5 204 944 A (WOLBERG <i>et al</i> ) 20 April 1993 See the whole document	18, 19, 23, 27

# INTERNATIONAL SEARCH REPORT

Information on patent family members

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This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report			Patent Family Member		
JP	8201913				
US	6219155	AU	64538/96	CA	2201621
		US	5859711	US	6035103
		US	6606165	US	6633396
		US	6657741	US	6707563
		US	2002089684	US	2004070788
		US	2004125391	US	2005007621
GB	2203919	DE	3813461	FR	2614488
		JP	63269885	US	4835594
JP	8095371				
US	6636216	AU	11391/00	AU	83227/98
		AU	83236/98	AU	83238/98
		AU	2002304987	AU	2002304988
		AU	2002304992	AU	2002323712
		AU	2002325636	AU	2002325637
		AU	2002325641	AU	2002328661
		AU	2002331409	AU	2004203658
		CA	2296439	CA	2399470
		CA	2456692	CA	2456707
		CA	2456728	CA	2456729
		CA	2456739	CA	2456778
		CA	2458732	CN	1556756
		CN	1558829	EP	0997033
		EP	0999934	EP	1021794
		EP	1303413	EP	1414650
		EP	1425178	EP	1425179
		EP	1425181	EP	1425182
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				AU	2002325078
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				CA	2296385
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		CA	2456735		
		CA	2456779		
		CN	1558828		
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US	6041600	US	6044646	US	6067797
US	6071750	US	6087638	US	6106147
US	6110754	US	6137500	US	6152619
US	6171875	US	6180427	US	6188415
US	6190931	US	6195150	US	6196541
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US	6217165	US	6220694	US	6224780
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US	6231773	US	6234609	US	6234610
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US	6238033	US	6238040	US	6238044
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US	6248249	US	6251298	US	6254220
US	6254793	US	6257704	US	6257705
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US	6264306	US	6264307	US	6264849
US	6264850	US	6267469	US	6267904
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US	6273544	US	6274056	US	6280643
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US	6293658	US	6294101	US	6299300
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US 6340222	US 6350023	US 6353772
US 6356715	US 6357135	US 6362843
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US 6366693	US 6374354	US 6378970
US 6378989	US 6378990	US 6381361
US 6382769	US 6390603	US 6394581
US 6398328	US 6402300	US 6412914
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US 6416167	US 6416168	US 6416170
US 6416679	US 6420196	US 6425651
US 6425657	US 6425658	US 6428147
US 6431669	US 6431704	US 6435664
US 6435667	US 6439689	US 6439694
US 6439695	US 6439699	US 6442525
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US 6451216	US 6454396	US 6457813
US 6460971	US 6464325	US 6464340
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US 6485123	US 6486886	US 6488358
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INFORMATION ON PATENT FAMILY MEMBERS

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US 6712986	US 6723575	US 6727948
US 6727951	US 6733116	US 6738096
US 6745331	US 6746105	US 6750901
US 6750944	US 6764166	US 6773874
US 6776476	US 6783217	US 6786420
US 6786570	US 6786573	US 6786574
US 6786661	US 6787051	US 6788336
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US 6820968	US 6824251	US 6824252
US 6824257	US 6827282	US 6830316
US 6830395	US 6831681	US 6832828
US 6834939	US 6840600	US 6848181
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US	2004196385	US	2004196386	US	2004196387
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US	2004207689	US	2004207690	US	2004207691
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US	2004223031	US	2004227789	US	2004233251
US	2004233252	US	2004233253	US	2004236961
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US	2004252165	US	2004257400	US	2004257403
US	2004257446	US	2004263551	US	2004263577
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US	2005024434	US	2005024435	US	2005024436
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US	2005041055	US	2005041066	US	2005041086
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US	2005046687	US	2005052497	US	2005052514

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Information on patent family members

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US	2005058489	US	2005058490	US	2005058491
US	2005061886	US	2005062803	US	2005062828
US	2005063758	US	2005063759	US	2005068371
US	2005073536	US	2005073554	US	2005078150
US	2005083376	US	2005083377	US	2005083392
US	2005087512	WO	0023279	WO	0202333
WO	9903680	WO	9903681	WO	9904368
WO	9904551	WO	03006246	WO	03013858
WO	03013860	WO	03013861	WO	03013862
WO	03013863	WO	03013864	WO	03013865
WO	03013866	WO	03013869	WO	03015395
WO	03029009	WO	03029012	WO	03067564
WO	03086762	WO	03086763	WO	03086764
WO	03086766	WO	03086767	WO	03086769
WO	03086770	WO	03091029	WO	2004001501
WO	2004002743	WO	2004002744	WO	2004002745
US	6128414				
US	5175808				
US	5204944	WO	9102319		
Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.					
END OF ANNEX					